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UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Biological Survey

DIRECTIONS FOR COLLECTING BIRDS' STOMACHS

In collecting birds' stomachs for the Biological Survey, the tags and schedules supplied by the Survey should be used. In addition to these supplies, penalty envelopes for returning the schedules and gummed franks for mailing packages of stomachs are furnished. These penalty envelopes and franks render unnecessary the payment of postage from points within the United States. Packages should not exceed 4 pounds in weight. When necessary, formalin for preserving the stomachs also will be supplied.

In removing the stomach (gizzard) from the bird, sever the intestine close to the stomach, and the esophagus (gullet) above the proventriculus (thickened part next gizzard); in any event leave a stub of gullet for convenience in attaching tag. If the crop or gullet is full of food, it should be inclosed with the stomach in a piece of thin cloth (cheese cloth is best) and securely tied with the tag thread. If any food has escaped, it also should be inclosed in the cloth with the stomach to which it belongs.

The tags should be numbered with good carbon ink, or, lacking that, with indelible pencil or soft lead pencil. When ink is used tags should not be put into the preservative until the ink is thoroughly dry. The numbers should form one continuous series, and should not be repeated, no matter how many stomachs are sent in. The tags should be tied securely to the esophagus (gullet) and the loose ends of the thread cut off.

Care should be taken that the data recorded on the schedule is associated with the duplicate number of the stomach to which it pertains. The essential items of data are: Name of bird, date of collection, and locality; without these the stomach is useless. If possible the remaining data asked for should be furnished.

Alcohol (70 per cent) is preferred as a preservative, but, lacking it, formalin (4 or 5 per cent, made by adding 20 to 24 parts of water to the commercial product) may be used for stomachs of small birds. The solution for preserving stomachs of large birds should be much stronger (use only 10 to 12 parts of water) and it is advisable to make a few punctures or short slits in wall of stomach to facilitate entrance of preserving fluid. Stomachs should remain in the preservative five days or as much longer as is convenient. Preservative once used for all the stomachs it will cover should not be used again.

When the stomachs are ready to be sent to the Biological Survey, they should be taken out of the alcohol or formalin and dried until no

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longer wet on the surface. If left too wet there is danger of leakage while in transit in the mail pouches. After drying, the stomachs should be wrapped in paper or cloth and put in a tin can, small wooden box, or similar receptacle, and any excess space tightly filled with crumpled paper, excelsior, or the like. It is well to wrap the container in a newspaper or other absorbent material before putting on the outside wrapper, which should be snug and firmly tied. It is preferable, although not essential, that stomachs be shipped in full schedule lots.

Address:

Bureau of Biological Survey,
U. S. Department of Agriculture,
Washington, D. C.

